

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

11. (Previously Presented) The method of claim 15, wherein the forming of the plurality of field emitters comprises etching material of the substrate to form the field emitters.

12. (Previously Presented) The method of claim 15, wherein the emitters are arranged into more than two demarcated, independently-addressable regions of emitters.

13. (Previously Presented) The method of claim 15, wherein the emitters are arranged into more than three demarcated, independently-addressable regions of emitters.

14. (Previously Presented) The method of claim 15, wherein the emitters are arranged into four demarcated, independently-addressable regions of emitters.

15. (Currently Amended) A method of forming a base plate for a field emission display (FED) device comprising:

providing a substrate configurable into a base plate for a field emission display (FED);

forming a plurality field emitters from material of the substrate, the emitters being arranged into more than one demarcated, independently-addressable region of emitters; and

providing address circuitry operably coupled with the field emitters and configured to independently address individual regions of the emitters, wherein the arrangement of emitters defines a plurality of rows and columns within each region, and the providing of the address circuitry comprises providing at least two separate row drivers for independently addressing and refreshing rows in different respective regions of the emitters, wherein a length of at least one of the rows and columns within individual regions of emitters is less than a length and width, respectively, of the individual region comprising the at least one of the rows and columns, and wherein an RC time constant of the field emission display device is reduced compared with address lines having dimensions substantially equal to the substrate.

16. (Currently Amended) A method of forming a base plate for a field emission display (FED) device comprising:

providing a substrate configurable into a base plate for a field emission display (FED);

forming a plurality field emitters from material of the substrate, the emitters being arranged into more than one demarcated, independently-addressable region of emitters; and

providing address circuitry operably coupled with the field emitters and configured to independently address individual regions of the emitters, the individual regions having a length and a width, wherein the arrangement of emitters defines a plurality of rows and columns within each region, and the providing of the address circuitry comprises providing at least two separate column drivers for addressing columns in different regions of the emitters, and wherein demarcation of individual regions of the emitters is achieved by forming address lines that are effectively contained within the individual respective regions of the emitters, and wherein a length of at least one row address line and one column address line in the respective individual regions is not greater than the respective one of the length and the width of the respective individual regions, and the length and the width of the individual regions are less than respective ones of a length and a width of a matrix from which the individual regions of the emitters are formed.

17. (Currently Amended) A method of forming a base plate for a field emission display (FED) device comprising:

providing a monolithic substrate configurable into a base plate for a field emission display (FED);

forming a plurality field emitters from material of the monolithic substrate, the emitters being arranged into more than one demarcated, independently-addressable region of emitters; and

providing address circuitry operably coupled with the field emitters and configured to independently address individual regions of the emitters, wherein the arrangement of emitters defines a plurality of rows and columns within each region, and the providing of the address circuitry comprises providing at least two separate row drivers and at least two separate column drivers for addressing rows and columns in different respective regions of the emitters, and wherein demarcation of individual regions of the emitters is achieved by forming address lines that are effectively contained within the individual respective regions of the emitters, wherein lengths of the address lines within the individual respective regions are less than respective lengths of the individual respective regions within which the address lines are formed.

18. (Currently Amended) A method of forming a base plate for a field emission display (FED) device comprising:

providing a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix;

partitioning the matrix into a plurality of discretely-addressable sub-matrices of field emitters; and

providing row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix, and at least one of the row address lines within the individual sub-matrices has a length that is not greater than a length or a width of the respective individual sub-matrices and at least one of the column address lines within the individual sub-matrices has a length that is not greater than the length or the width of the respective individual sub-matrices.

19. (Original) The method of claim 18, wherein the length of said one row or column address line within the matrix is less than a length or width dimension of the matrix.

20. (Original) The method of claim 18, wherein the length of said one row or column address line within the matrix is less than a length or width dimension of one of the sub-matrices.

21. (Original) The method of claim 18, wherein the partitioning of the matrix comprises partitioning said matrix into more than two sub-matrices.

22. (Original) The method of claim 18, wherein the partitioning of the matrix comprises partitioning said matrix into more than three sub-matrices.

23. (Original) The method of claim 18, wherein the partitioning of the matrix comprises partitioning said matrix into four sub-matrices.

24. (Currently Amended) A method of forming a field emission display (FED) device comprising:

providing a substrate configurable into a base plate for a field emission display (FED);

forming a plurality of discrete, segmented regions of field emitter tips by removing at least portions of the substrate; individual discrete, segmented regions being electrically isolated into separately-addressable regions of field emitter tips, wherein the electrical isolation is achieved by forming row and column address lines individually having a length that is less than a respective length and width of an area from which the segmented regions are formed, and wherein at least one row and column address line within the area has a length that is less than the length and width of at least one of the individual segmented regions;

providing a face plate supporting areas of luminescent material; and

mounting the face plate in operable proximity with the substrate.

25. (Original) The method of claim 24, wherein the forming of the plurality of discrete, segmented regions comprises forming at least two regions.

26. (Original) The method of claim 24, wherein the forming of the plurality of discrete, segmented regions comprises forming at least three regions.

27. (Original) The method of claim 24, wherein the forming of the plurality of discrete, segmented regions comprises forming at least four regions.

Claims 28-31 (Canceled).

32. (Currently Amended) A method of forming a field emission display (FED) device comprising:

providing a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix;

partitioning the matrix into a plurality of discretely-addressable sub-matrices of field emitters;

providing row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix, and at least one of the row address lines formed within the individual sub-matrices has a length that is less than a length or a width of the respective individual sub-matrices, and at least one of the column address lines formed within the individual sub-matrices has a length that is less than the length and the width of the respective individual sub-matrices;

providing a face plate supporting areas of luminescent material; and

mounting the face plate in operable proximity with the monolithic addressable matrix.

Claims 33-40 (Canceled).

41. (Currently Amended) A field emission display (FED) device comprising:

a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix; the matrix being partitioned into a plurality of discretely-addressable sub-matrices of field emitters, wherein partitioning of the matrix is performed by forming address lines that are effectively contained within the respective sub-matrices of field emitters;

row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix, wherein at least one of the address lines within the respective sub-matrices has a length that does not exceed a length of the respective individual sub-matrices within which the respective address line is formed; and

a face plate supporting areas of luminescent material mounted in operable proximity with the monolithic addressable matrix.

42. (Original) The field emission display (FED) device of claim 41, wherein the matrix comprises more than two sub-matrices.

43. (Original) The field emission display (FED) device of claim 41, wherein the matrix comprises more than three sub-matrices.

44. (Original) The field emission display (FED) device of claim 41, wherein the matrix comprises four sub-matrices.

45. (Currently Amended) A method of forming a base plate for a field emission display (FED) device comprising:

providing a monolithic substrate configurable into a base plate for a field emission display (FED);

forming a plurality of discrete, segmented regions of field emitter tips by removing at least portions of the substrate to provide a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix; the matrix being partitioned into a plurality of separately-addressable sub-matrices of field emitters, and wherein partitioning of the matrix is performed by forming address lines that are effectively contained within the respective sub-matrices of field emitters;

row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix, wherein at least one of the address lines within the respective sub-matrices has a length that is not greater than a length of the respective individual sub-matrices within which the respective address line is formed; and

a face plate supporting areas of luminescent material mounted in operable proximity with the monolithic addressable matrix.

46. (Previously Presented) The field emission display (FED) device of claim 45, wherein the matrix comprises more than two sub-matrices.

47. (Previously Presented) The field emission display (FED) device of claim 45, wherein the matrix comprises more than three sub-matrices.

48. (Previously Presented) The method of claim 15, wherein the independently addressable regions of emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the emitters.

49. (Previously Presented) The method of claim 48, wherein the independently addressable regions are formed by modifying the photomask such that subsequently-etched row and column lines are contained within individual respective regions of emitters without extending into other individual regions.

50. (Previously Presented) The method of claim 16, wherein the independently addressable regions of emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the emitters.

51. (Previously Presented) The method of claim 50, wherein the independently addressable regions are formed by modifying the photomask such that subsequently-etched row and column lines are contained within individual respective regions of emitters without extending into other individual regions.

52. (Previously Presented) The method of claim 17, wherein the independently addressable regions of emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the emitters.

53. (Previously Presented) The method of claim 52, wherein the independently addressable regions are formed by modifying the photomask such that subsequently-etched row and column lines are contained within individual respective regions of emitters without extending into other individual regions.

54. (Previously Presented) The method of claim 18, wherein the independently addressable regions of emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the emitters.

55. (Previously Presented) The method of claim 54, wherein the independently addressable regions are formed by modifying the photomask such that subsequently-etched row and column lines are contained within individual respective regions of emitters without extending into other individual regions.

56. (Previously Presented) The method of claim 24, wherein the segmented regions are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the emitters.

57. (Previously Presented) The method of claim 24, wherein the segmented regions are formed by modifying a photomask such that subsequently-etched row and column lines are contained within individual respective regions of emitters without extending into other individual regions.

58. (Previously Presented) The method of claim 32, wherein the discretely addressable sub-matrices of field emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable sub-matrices of the field emitters.

59. (Previously Presented) The method of claim 58, wherein the discretely addressable regions of field emitters are formed by modifying a photomask such that subsequently-etched row and column lines are contained within individual respective sub-matrices of field emitters without extending into other sub-matrices.

60. (Previously Presented) The field emission display of claim 41, wherein the discretely addressable sub-matrices of field emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable regions of the field emitters.

61. (Previously Presented) The field emission display of claim 41, wherein the discretely addressable regions of field emitters are formed by modifying a photomask such that subsequently-etched row and column lines are contained within individual respective regions of field emitters without extending into other individual regions.

62. (Previously Presented) The method of claim 45, wherein the separately addressable sub-matrices of field emitters are formed by configuring a photomask such that subsequently-etched row and column lines extend across a matrix that corresponds only to the addressable sub-matrices of the field emitters without extending into other individual sub-matrices.

Please add the following new claims:

63. (New) A field emission display (FED) device comprising:

a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix; the matrix being partitioned into a plurality of discretely-addressable sub-matrices of field emitters, wherein partitioning of the matrix is performed by forming address lines that are effectively contained within the respective sub-matrices of field emitters wherein forming the plurality of field emitters from the monolithic addressable matrix provides increased resolution and uniformity of images formed on the field emission display device when compared with field emitters that are not formed from the monolithic addressable matrix;

row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix; and

a face plate supporting areas of luminescent material mounted in operable proximity with the monolithic addressable matrix, wherein the field emission display is configured to display multiple images, and the row and column address lines are configured to independently refresh individual field emitters, and further wherein RC time constant of the field emission display device is reduced compared with row and column address lines having lengths substantially equal to dimensions of the

monolithic addressable matrix to provide increased refresh rates of the field emission display device.

64. (New) A method of forming a base plate for a field emission display (FED) device comprising:

providing a monolithic substrate configurable into a base plate for a field emission display (FED);

forming a plurality of discrete, segmented regions of field emitter tips by removing at least portions of the substrate to provide a monolithic addressable matrix of rows and columns of field emitters, the matrix having a perimetral edge defining length and width dimensions of the matrix; the matrix being partitioned into a plurality of separately-addressable sub-matrices of field emitters, and wherein partitioning of the matrix is performed by forming address lines that are effectively contained within the respective sub-matrices of field emitters;

row and column address lines operably coupled with the matrix and collectively configured to address the field emitters, at least one of the row or column address lines having a length within the matrix which is sufficient to address less than all of the field emitters which lie in the direction along which the at least one row or column address line extends within the matrix, wherein at least one address line within the respective sub-matrices has a length that is less than a length of the respective individual sub-matrices within which the address line is formed; and

a face plate supporting areas of luminescent material mounted in operable proximity with the monolithic addressable matrix.